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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/727,842	11/30/2000	Francis James Canova JR.	PALM-3520 . US . P	3911

7590 02/23/2005
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EXAMINER

ABDULSELAM, ABBAS I

ART UNIT PAPER NUMBER

2674

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/727,842

Applicant(s)

FRANCIS CANOVA

Examiner

Abbas I Abdulsalam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,6,8-17 and 19-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,6,8-17 and 19-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/15/04 has been entered.

Response to Arguments

2. Applicant's arguments filed 02/10/05 have been fully considered but they are not persuasive.

Applicant argues that the cited reference, Ho (USPN 6407757) does not teach a number of flexible layers of materials fastened along one with the edge in its entirety connected to a housing. Applicant also argues that Ho does not teach changing the display according to the rate of movement of the more than one flexible layers, wherein the rate of movement corresponds to how quickly the flexible layers are moved by the user.

However, as shown in Fig. 2, Ho teaches a browsing device (200) whose one side is connected with a computer (205) as shown in Fig. 2A. Ho further teaches an embodiment with a browsing device that uses many thin, hard, and flexible pieces of material bound together in the manner of the binding of the pages of a book as shown in Fig. 15(A-C). It would have been to utilize a browsing device shown in Fig. 15A inside a computer system shown in Fig. 2A.

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Also as shown in the art rejection below, Ho teaches that depending on the magnitude of the force applied with respect to flipping, different forms of display (600) can be created (col. 21, 11-67 and Fig. 6A). In addition, Ho's Fig. 7 shows a browsing device (740) used in conjunction with a computer screen (721) of displaying various pages. Ho teaches the user's finger applying various amount of force (F1, F2), and discloses that the speed of flipping of one page or the number of pages flipped across at any given time increases as the force on the sensor 121 or 171 of the browsing device (200) increases (col. 29, 56-67, col. 30, lines 1-10 and Fig. 10A-10H). Therefore it would have been obvious to utilize Ho's application magnitude of the force to the sensors with respect to flipping to meet the desired feature, "the rate of movement of more than one flexible layers". Further it would have been obvious to utilize Ho's "speed of flipping" to achieve another desired feature, "how quickly the flexible layers are moved." Furthermore, it would have been obvious to utilize Ho's application of force to the sensors and the speed of flexible layers with respect to various formation of display (721) as illustrated in Fig. 7

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-6, 8-17 and 19-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ho (USPN 6407757).

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Regarding claims 1, 11 and 21, Ho as shown in Fig. 7 teaches a browsing device (740) sending signals through a bus (741) to a computer input port (730) and to a browsing /viewing software, (720), so as to effect operations on the screen (721) of the computer. Ho teaches a conversion software (710) enabling to pre-convert a document (701) to be used in conjunction with a browsing device (740). See col. 25, lines 10-40 and Fig. 7. However, in Fig. 7, Ho does not illustrate a user interface including “a plurality of flexible layers” fastened to each other along a single edge in a stack, and not fastened to each other along other edges. On the other hand, Ho teaches as shown in Figs (15A-15C) a device (1500) which includes may thin, hard and flexible pieces of material (1501) bound together in a manner of a binding of pages in a book. See col. 33, lines 26-37. Further, Ho teaches that device (1500) has four buttons (1511-1514) on the top surface (1530), and four buttons (1531-1534) on the bottom surface (1530) serving as function buttons as shown in Fig. 15B.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace Ho’s browsing device (740) by a device (1550) of Fig. 15 for the purpose of browsing or scrolling through documents or any information stored in the computer.

Furthermore, Ho teaches as shown in Fig. 2 an assembly (200) which is electrically and operatively connected to the computer (205) with left and right thumbs (172, 122) operating on the left and right sensor areas (171 and 121) respectively, such that thumbs apply the flipping force to the sensors (121, 171, col. 21, lines 1-3). Ho further adds that depending on the magnitude of the force applied with respect to flipping, different forms of display (600) can be created (col. 21, 11-67 and Fig. 6A).

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Regarding claim 11, in addition to what has been described, Ho as shown in Fig. 4A teaches a movement through a document under the control of thumb on the browsing device such that the amount of force applied by the thumb determines the initiation of movement through document (405, 406) as well as positions (406). See fig. 4A. It would have been obvious that the “initiation of movement through document” can be used to satisfy the desired detection of movement of the layers. Ho teaches the user's finger applying various amount of force (F1, F2) with respect to the speed of flipping, and discloses that the speed of flipping of one page or the number of pages flipped across at any given time) increases as the force on the sensor 121 or 171 of the browsing device (200) increases (col. 29, 56-67, col. 30, lines 1-10 and Fig. 10A-10H).

Regarding claim 21, in addition to what has been described above, Ho teaches a computer-based process permitting different organizations of material corresponding to display format including organized pages that can be flipped. See col. 7, lines 22-43. Ho further teaches a method of generating flipping pages from a document stored in some media on a personal computer such as lab tap. See col. 20, lines 29-33. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the lab tap as a personal computer for the purpose of organizing and incorporating the flipping technique.

Regarding claims 2, 12 and 22, Ho discloses an open fan display for displaying pages used in conjunction with the flipping method (500) (Fig. 5A, 6A). Ho teaches that the flipping is to take place using at thumb (122). See col. 21, lines 12-23. It would have been obvious the flipping constituted separation of one page (602) from the other (603) and hence meets “the desired separation of a first flexible layer from a second flexible layer.”

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Regarding claims 3, 13 and 23, Ho teaches as shown in the Fig. 14, a process by which the flipping display of Figs (13A-13B) is generated. Ho details flipping action with respect to moving points (1404, 1405) and arcs (1406) generated based on the equation illustrated in Fig. 14C. It would have been obvious the movement on the curve shown in Fig. 14 meets flexibility separation as well as contacting of pages.

Regarding claims 14, 17, 24-25 and 27, Ho teaches as shown in Fig. 13A a page (1301) bending as it is being flipped from right to left. See col. 32, lines 55-56.

Regarding claims 5 and 15, Ho teaches the position of the thumb (122) in the x direction on the sensor area as detected by the position sensors (121) on the slanted surface (120). See col. 13, lines 1-18.

Regarding claim 8, Ho discloses flip through the pages at varying speeds depending on the need to view the material in the book. See col. 2, lines 37-42.

Regarding claims 9-10 and 19-20, see Fig. 7 (730, 740).

Regarding claims 6, 16 and 26, Ho teaches that teaches a computer-based process in which organization of materials are used including organizing into pages that can be flipped through page by page from right to left or vise versa. See col. 7, lines 21-30. It would have been obvious that such a flip maintains the order of the pages and hence meets the desired order in which flexible layers are moved.

Regarding claim 28, Ho discloses flip through the pages at varying speeds depending on the need to view the material in the book. See col. 2, lines 37-42.

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Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following arts are cited for further reference.

U.S. pat. No. 5,047,960 to Sloan

U.S. Pat. No. 5,875,269 to Yamashita et al.

5. Any inquiry concerning this communication or earlier communication from the examiner should be directed to **Abbas Abduselam** whose telephone number is **(703) 305-8591**. The examiner can normally be reached on Monday through Friday (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Patrick Edouard**, can be reached at **(703) 308-6725**

Any response to this action should be mailed to:

Commissioner of patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314

Hand delivered responses should be brought to Crystal Park II, Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology center 2600 customer Service office whose telephone number is (703) 306-0377.


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Abbas Abdulsalam

Examiner

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February 17, 2004


XIAO WU
PRIMARY EXAMINER